

WHAT IS CLAIMED IS:

1. A barrier operator system for moving a barrier between open and closed positions, including:

an operator mechanism operably connected to a barrier for moving said barrier
5 between open and closed positions;

a base controller operably associated with said operator mechanism for causing said operator mechanism to move said barrier; and

at least one remote controller adapted for signal transmitting communication with said base controller, said at least one remote controller including a speech activatable unit
10 comprising a speech recognition module programmable to recognize one or more spoken words for effecting operation of said barrier to move between said open and closed positions.

2. The barrier operator system set forth in claim 1 wherein:

15 said at least one remote controller includes a radio frequency (RF) transmitter operably connected to said speech recognition module for transmitting a radio frequency signal to said base controller in response to a signal from said speech recognition module.

3. The barrier operator system set forth in claim 2 including:

20 a microcontroller operably connected to said RF transmitter and to said speech recognition module and operable to transmit a signal to said RF transmitter on receipt of a signal from said speech recognition module.

4. The barrier operator system set forth in claim 3 wherein:

25 said microcontroller is operable to provide a rolling code signal for transmission by said RF transmitter.

5. The barrier operator system set forth in claim 2 wherein: said at least one remote controller includes a keypad operably connected to a microcontroller and operable
30 to provide a signal to said microcontroller to command operation of said RF transmitter.

6. The barrier operator system set forth in claim 2 wherein: said at least one remote controller is hardwired to said base controller.

7. The barrier operator system set forth in claim 1 wherein:
5 said at least one remote controller includes a radio frequency (RF) transmitter operably connected to a microcontroller for transmitting signals to said base controller.

8. The barrier operator system set forth in claim 1 wherein:
10 said speech recognition module includes a microphone for receiving a human voice signal including a gateway word and at least one command word for effecting at least one of controlling lighting within or adjacent to an enclosure closed by said barrier and controlling opening and closing of said barrier.

9. The barrier operator system set forth in claim 1 wherein:
15 said barrier comprises an upward acting garage door.

10. The barrier operator system set forth in claim 1 wherein:
20 said speech recognition module is operable to respond to voice commands in a speaker dependent mode.

11. The barrier operator system set forth in claim 1 wherein:
25 said speech recognition module is operable to continuously listen for at least one of a gateway word and a command word for causing said at least one remote controller to effect transmission of a signal to said base controller.

12. The barrier operator system set forth in claim 1 wherein:
30 said at least one remote controller includes a manually actuatable switch for effecting operation of said barrier to move between open and closed positions.

13. The barrier operator system set forth in claim 12 wherein:
 said at least one remote controller includes a multi-digit keypad.

14. A door operator system for moving an upward acting door between open and closed positions, including:

an operator mechanism operably connected to a door for moving said door between open and closed positions;

5 a base controller operably associated with said operator mechanism for causing said operator mechanism to move said door;

a wall mounted remote controller adapted for signal transmitting communication with said base controller, said remote controller including a speech activatable unit comprising a speech recognition module programmable to recognize one or more spoken words for effecting operation of said door to move between said open and closed positions;

a radio frequency (RF) transmitter operably connected to said speech recognition module for transmitting a radio frequency signal to said base controller in response to a signal from said speech recognition module; and

15 a microcontroller operably connected to said RF transmitter and to said speech recognition module and operable to transmit a signal to said RF transmitter on receipt of a signal from said speech recognition module.

15. The operator system set forth in claim 14 wherein:

20 said microcontroller is operable to provide a rolling code signal for transmission by said RF transmitter.

16. The operator system set forth in claim 14 wherein:

25 said remote controller includes a keypad operably connected to said microcontroller and operable to provide a signal to said microcontroller to command operation of said RF transmitter.

17. The operator system set forth in claim 14 wherein:

30 said speech recognition module includes a microphone for receiving a human voice signal including a gateway word and at least one command word for effecting at least one of controlling lighting within or adjacent to an enclosure closed by said door and controlling opening and closing of said door.

18. The operator system set forth in claim 14 wherein:

said speech recognition module is operable to respond to voice commands in a speaker dependent mode.

5 19. The operator system set forth in claim 14 wherein:

said speech recognition module is operable to continuously listen for at least one of a gateway word and a command word for causing said remote controller to effect transmission of a signal to said base controller.

10 20. The operator system set forth in claim 14 wherein:

said remote controller includes a manually actuatable switch for effecting operation of said door to move between open and closed positions.

21. The operator system set forth in claim 20 wherein:

15 said remote controller includes a multi-digit keypad, for controlling said microcontroller.

22. A barrier operator system for moving a barrier between open and closed positions, including:

20 an operator mechanism connected to a barrier for moving said barrier between open and closed positions;

a head unit associated with said operator mechanism for causing said operator mechanism to move said barrier; and

25 at least one remote transmitter adapted for signal transmitting communication with said head unit, said at least one remote transmitter including voice analysis comprising a speech recognition processor programmable to recognize one or more spoken words for effecting operation of said barrier to move between said open and closed positions.

30 23. The barrier operator system set forth in claim 22 wherein:

said at least one remote transmitter includes a radio frequency (RF) transmitter connected to said speech recognition processor for transmitting a radio frequency signal to said head unit in response to a signal from said speech recognition processor.

5 24. The barrier operator system set forth in claim 23 including:

a microcontroller connected to said RF transmitter and to said speech recognition processor and operable to transmit a signal to said RF transmitter on receipt of a signal from said speech recognition processor.

10 25. The barrier operator system set forth in claim 24 wherein:

said microcontroller is operable to provide a rolling code signal for transmission by said RF transmitter.

15 26. The barrier operator system set forth in claim 23 wherein: said at least one remote transmitter includes a keypad operably connected to a microcontroller and operable to provide a signal to said microcontroller to command operation of said RF transmitter.

20 27. The barrier operator system set forth in claim 23 wherein: said at least one remote transmitter is hardwired to said head unit.

25 28. The barrier operator system set forth in claim 22 wherein:

said at least one remote controller includes a radio frequency (RF) transmitter connected to a microcontroller for transmitting signals to said head unit.

29. The barrier operator system set forth in claim 22 wherein:

30 said speech recognition processor includes a microphone for receiving a human voice signal including a passcode and at least one command word for effecting at least one of controlling lighting within or adjacent to an enclosure closed by said barrier and controlling opening and closing of said barrier.

30. The barrier operator system set forth in claim 22 wherein:

said barrier comprises an upward acting garage door.

31. The barrier operator system set forth in claim 22 wherein:

5 said speech recognition processor is operable to respond to voice commands in
a speaker dependent mode.

32. The barrier operator system set forth in claim 22 wherein:

10 said speech recognition processor is operable to listen for at least one of a
passcode and a command word for causing said at least one remote transmitter to effect
transmission of a signal to said head unit.

33. The barrier operator system set forth in claim 22 wherein:

15 said at least one remote transmitter includes an activate button for effecting
operation of said barrier to move between open and closed positions.

34. The barrier operator system set forth in claim 33 wherein:

 said at least one remote transmitter includes a multi-digit keypad.

20 35. A door operator system for moving an upward acting door between open and
closed positions, including:

 an operator mechanism connected to a door for moving said door between open
and closed positions;

 a head unit associated with said operator mechanism for causing said operator
mechanism to move said door;

25 a wall mounted remote transmitter adapted for signal transmitting communication
with said head unit, said remote transmitter including voice analysis comprising a speech
recognition processor programmable to recognize one or more spoken words for effecting
operation of said door to move between said open and closed positions;

30 a radio frequency (RF) transmitter connected to said speech recognition processor
for transmitting a radio frequency signal to said head unit in response to a signal from
said speech recognition processor; and

a microcontroller connected to said RF transmitter and to said speech recognition processor and operable to transmit a signal to said RF transmitter on receipt of a signal from said speech recognition processor.

5 36. The operator system set forth in claim 35 wherein:

said microcontroller is operable to provide a rolling code signal for transmission by said RF transmitter.

10 37. The operator system set forth in claim 35 wherein:

said remote transmitter includes a keypad connected to said microcontroller and operable to provide a signal to said microcontroller to command operation of said RF transmitter.

15 38. The operator system set forth in claim 35 wherein:

said speech recognition processor includes a microphone for receiving a human voice signal including a passcode and at least one command word for effecting at least one of controlling lighting within or adjacent to an enclosure closed by said door and controlling opening and closing of said door.

20 39. The operator system set forth in claim 35 wherein:

said speech recognition processor is operable to respond to voice commands in a speaker dependent mode.

25 40. The operator system set forth in claim 35 wherein:

said speech recognition processor is operable to listen for at least one of a passcode and a command word for causing said remote transmitter to effect transmission of a signal to said head unit.

30 41. The operator system set forth in claim 35 wherein:

said remote transmitter includes an activate button for effecting operation of said door to move between open and closed positions.

42. The operator system set forth in claim 41 wherein:

said remote transmitter includes a multi-digit keypad, for controlling said microcontroller.